

THE JOHNS HOPKINS UNIVERSITY

BALTIMORE 18, MARYLAND

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MCCOLLUM-PRATT INSTITUTE
INVESTIGATION OF
MICRONUTRIENT ELEMENTS

Pear Josh,

It is 5¹⁵ a.m. - just the time of the solid log-phase of this damned bug. I am trying to do your lactose exp. and on top of that ~~is~~ a penicillin exp. Probably two sleepless nights - and people will probably be forced anyhow to know that galactose looks 3096 against penicillin (if it does ??).

Mike Yarmolinsky is with me - but to tonight (at 'midnite') we both went to our Baltimore rooms with alarm clocks - he probably just knock his down from the table).

I hope that I can get him out a graduate student interested in H.2.

- Your question about galacton in some γ cell wall can best be answered with respect to 4-aminorase-less 3099. I ought to send you a photograph of a pretty chrome-to-gram sprayed with silver (not Danish Silver). This the glucose-gal spot rechrom. in a pyridine mix which separates gluc. + gal well. There are probably 100 μ glucose in this nice spot ~~and~~ not a trace of gal (0.5 μ words have

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been just detectable. Hence unlike many B strains which acc. to Westphal et al contain rhamnose (main part) and gluc & gal 10 to 3 (i.e. acc. to Delair's equil.) K₁₂ 3099 has no detectable galactose. This corresponds ~~to~~ well with the fact that '99' grows well in a pure glycerol, amm. min. med. The other strain analyzed is 3096 (transf.-less) and it has neither detect. amounts of Galactose. I did not mount as much on the paper as on 99 and the lack of galactose is therefore not that 'watertight.' We must do 3100 of course but I need some coworkers. It is a lot of work, espec. the fractionations.

- The leaky 'Gal 3' invertase are very much. Phil Hartman put his bet on an inversion. This interests me somewhat - because I find that the constit. epimerase moderately lowered and the induced greatly lowered (only 1% of 3100, 3096 + 3092). Could it be that the location of a repressor gene (or in close gene) affects the amount of induced protein synthesized? - I have still frozen the 'lysates' of a 300 liter run of '3092'. But the agony of getting things running here has prevented me from working the batch up. The fingerprinting is ~~far~~ off. But remember that yeast epimerase has built in DPN and is probably only 30×10^3 big (per. incorp DPN). This applies probably also to

K_{12} epinephrine. — Bernie Hirsch has gotten some
of you through a "semi phony" character at NIH.
I sent him 3096 upon his request. I don't know
what he is doing with it and I don't care; I
suppose you don't either. I am looking forward to see
Jacques Monod in Boston next month. Are you coming?
We missed you at the Genetic Symposium in Chicago.
It is 540 - next aliquots

Hope to see you soon
As ever yours
